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Descriptions of a new species and six new subspecies of the genus *Euthalia* (subgenus *Limbusa*), with designation of lectotype of *Euthalia pratti occidentalis* (Lepidoptera, Nymphalidae)

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Abstract A new species and six new subspecies of *Euthalia* (*Limbusa*) (Lepidoptera, Nymphalidae) from China, Laos, Myanmar, and Vietnam, belonging to the continental species-group, are described. Lectotype of *Euthalia pratti occidentalis* Hall is designated because its type series comprises two species.

Key words Lepidoptera, Nymphalidae, *Euthalia*, *Limbusa*, *alpherakyi*, *aristides*, *bellula*, *duda*, *hebe*, *khambounei*, *kobayashii*, *koharai*, *masaokai*, *niwai*, *occidentalis*, *formosana*, *pacifica*, *pratti*, *pulchella*, *pyrrha*, *sahadeva*, *strephon*, *thibetana*, *tsuchiyai*, *ueharai*, *undos*a, new species, new subspecies, taxonomy, lectotype, China, Myanmar, Laos, Vietnam.

I. Description of a new species

Euthalia (*Limbusa*) *koharai* sp. n. (Figs 1–4)

♂. Length of forewing 43–48 mm. Wing shape: Forewing, costa evenly curved, with apex slightly round; termen somewhat concave inside, dentate at end of each vein; hind margin straight. Hindwing, termen remarkably dentate at end of each vein. Wing pattern: upperside of forewing, ground colour deep greenish-brown; subbasal circular marks peculiar to the genus conspicuous; a discal band comprised of pale yellow spots from spaces 6 to 1a, edged outside with a black wedge-shaped mark in space 3; costa not irrorated with white scales; two pale yellow spots in spaces 8 and 6 in subapical area; a black subterminal band running from costa to space 1b, turning basad in spaces 3 and 4; cilia white, stained with black beyond veins. Upperside of hindwing, ground colour as in forewing; a conspicuous black oblong mark at discocellular; a discal row of yellowish-white spots extending from spaces 7 to 1b, edged outside with boomerang-shaped black marks; colour distad of discal row of white spots bluish-white, gradually changing to blackish-blue towards termen; cilia white, stained with black beyond veins. Underside of forewing, colour varying, usually greenish yellow-brown; a black subterminal band running from costa to space 1a, rudimentary except in spaces 2 and 1b. Underside of hindwing, ground colour as in forewing; basal irregularly circular markings conspicuous; a black line present inside a discal row of white spots, edged inside the white spots by a greenish-blue subterminal band running from spaces 7 to 1b; conspicuous black spot in space 1b. Venation: Hindwing cell open. Antenna: Black above, uniformly brown beneath. Male genitalia (Fig. 9): Uncus gradually narrowed towards tip; valva somewhat slender, slightly broadened near middle, bearing approximate ten short spines at tip; lower part of apex of valva twisted nearly 90 degrees outwards.

♀. Length of forewing 48–51 mm. Wing shape: Both wings almost identical to male, but rounder. Wing pattern: almost as in male; variable in ground colour, which is usually pale greenish yellow on underside. Venation: as in male. Antenna: as in male.

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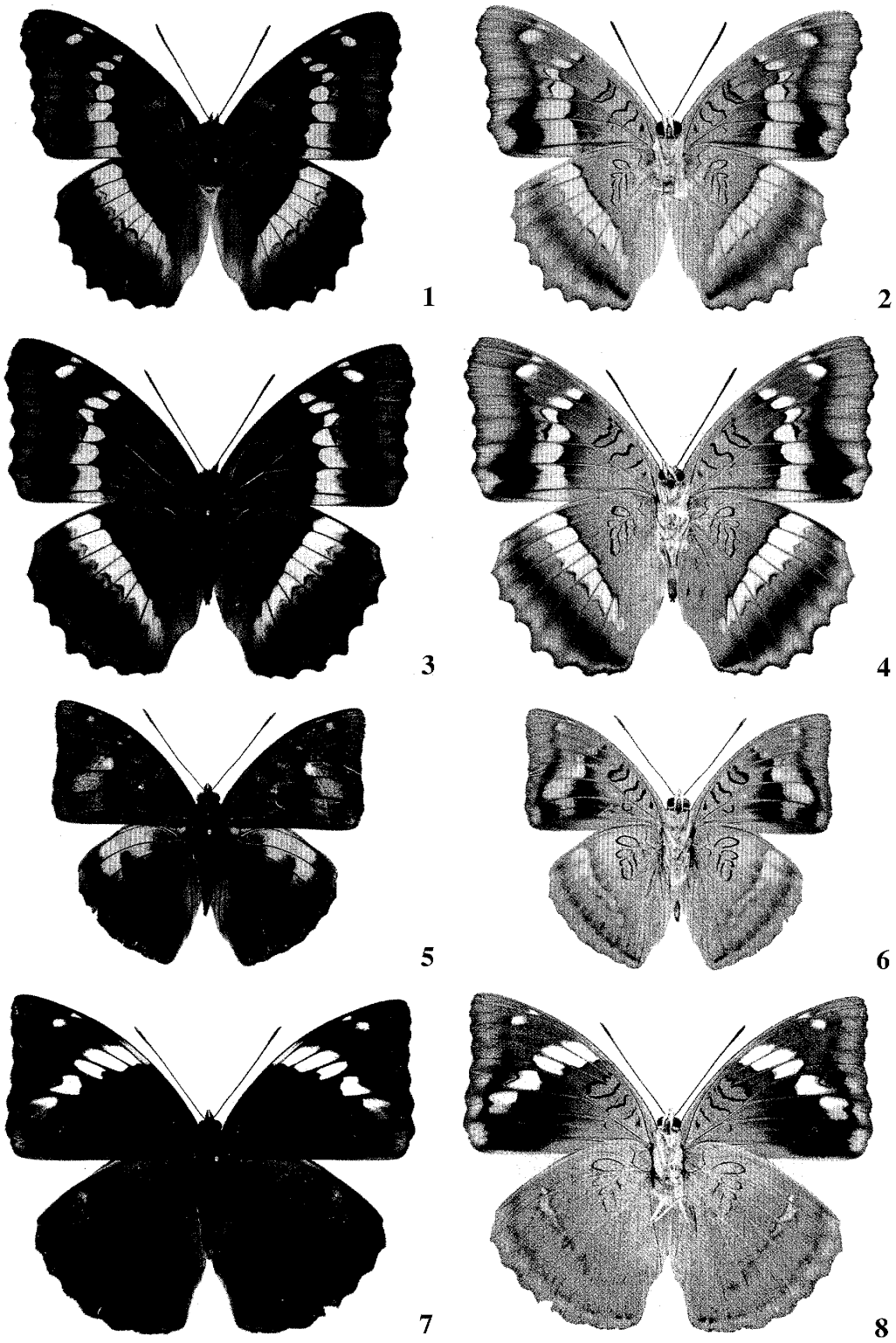

Figs 1–8. *Euthalia* (*Limbusa*) spp. 1–4. *E.* (*L.*) *koharai* sp. n. (1–2: Holotype, ♂, now in coll. Yokochi. 3–4: Paratype, ♀, in coll.Yokochi). 5–8. *E.* (*L.*) *pacifica masaokai* ssp n. (5–6: Holotype, ♂, now in coll. Yokochi. 7–8: Paratype, ♀, in coll. Yokochi)

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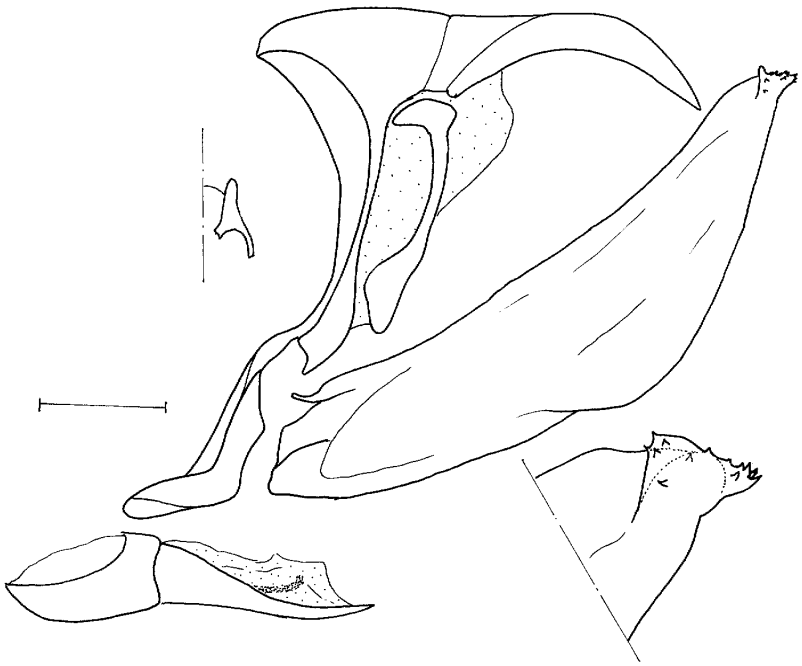

Fig. 9. Male genitalia of *Euthalia* (*Limbusa*) *koharai* sp. n.

Distribution. Yunnan and Guangxi, China.

Holotype. ♂, Jizu-shan, Binchuan, Yunnan, China, 27, June 2003, now in the collection of Takashi Yokochi, will be deposited in Kitakyushu Museum of Natural History & Human History, Fukuoka (KMNH). Paratypes. 1 ♂, Zhongdian, Yunnan, July 2001; 4 ♂ 1 ♀, Jizu-shan, Binchuan, Yunnan, 27, June 2003; 1 ♂ 1 ♀, Dayao-shan, Guangxi, May 1998; 4 ♂ 2 ♀, Dayao-shan, Guangxi, June 1998. Paratypes are preserved in the collection of Takashi Yokochi.

The new species name *koharai* is dedicated to Mr Yoh-ichi Kohara, Tokyo, one of my fellow entomologists.

I place this new species *koharai* in the continental species-group of *Euthalia* (*Limbusa*). Several species with a discal whitish band in both wings are in the subgenus *Limbusa*, and *koharai* is included in this group. As they have similar characters, distinction one from another is not easy. The new species *koharai* is morphologically close to *thibetana* Poujade, 1885 (=*undosa* Fruhstorfer, 1906) and *alpherakyi* Oberthür, 1907: *thibetana* will be shown to be a senior synonym of *undosa* in a further paper in preparation. The differential diagnosis is as follows:

Differential diagnosis between *koharai* and *thibetana*

1) *Koharai* is larger in size and slightly rounder in wing shape than *thibetana*.
2) The discal whitish band of forewing is pale yellow and yellowish-white on hindwing in *koharai*, but that of *thibetana* is deeper yellow.
3) The ground colour of the upperwing is deep greenish-blue in *koharai*, but is tinged with brown in *thibetana*.

Differential diagnosis between *koharai* and *alpherakyi*

1) In *koharai*, a bluish-white area exists outside the discal row of white spots, but there is no such area in *alpherakyi*.

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2) In the *koharai* male, the white spot in space 3 of the forewing is convex outside, but that of *alpherakyi* is nearly flat.
3) In *koharai* male genitalia, the lower part of the valva-apex is twisted nearly 90 degrees outwards, but that of *alpherakyi* is gently twisted.

II. Descriptions of six subspecies

1. *Euthalia* (*Limbusa*) *pacifica masaokai* ssp. n. (Figs 5–8)

This new subspecies *masaokai* from Xamneua, N. Laos is distinguishable from ssp. *pacifica* Mell, 1935, in the following characters.

♂. Ground colour of upperside deep green (dark brown in ssp. *pacifica*); yellow spot in space 3 of forewing; yellow area of hindwing limited in spaces 2 and 1b (extending to spaces 5, 4, 3, 2, and 1b in ssp. *pacifica*); ground colour of hindwing bluish green (greenish brown in ssp. *pacifica*); a series of subterminal spots distinct (dull in ssp. *pacifica*).

♀. Ground colour of upperside deep green (moss-green in ssp. *pacifica*); a discal row of white spots of forewing larger; a series of subterminal white spot slightly more obscure; ground colour of hindwing bluish green (greenish brown in ssp. *pacifica*).

Length of forewing: ♂ 36–38 mm; ♀ 46–49 mm.

Distribution. N. Laos.

Holotype. ♂, Xamneua, N. Laos. 18, Jun. 2000, now in coll. Yokochi, will be deposited in Kitakyushu Museum of Natural History & Human History, Fukuoka (KMNH). Paratypes. The same locality as holotype. 1♂, 1, Jun.2000; 1♂, Jun.–Aug. 2000; 1♀, 7, Jul. 2000; 1♀, 19, Jun. 2001 (in coll. T. Yokochi), 1♂, 9, Jun. 1999; 1♂, 3, Jun. 2000; 1♀, 5, Jun. 2000; 1♂, 17, Jun. 2000; 1♀, 22, Jun. 2000; 1♀, 26, Jun.2000; 1♀, 9, Jul. 2000; 1♂, 6, Jun. 2001; 3♂, 28, May 2002; 4♂, 29, May 2002; 1♂, 31, May 2002; 2♂, 2, Jun. 2002; 2♂, 4, Jun. 2002; 2♂, 5, Jun. 2002; 1♂, 7, Jun. 2002; 1♂, 8, Jun. 2002; 1♂, 12, Jun. 2002; 1♂1♀, 15, Jun. 2002; 1♂, 6, Jul. 2002 (in coll. J. Uehara).

The new subspecies name *masaokai* is dedicated to Dr Akira Masaoka, the emeritus professor of Nagoya City Unversity, Aichi, Japan.

2. *Euthalia* (*Limbusa*) *duda bellula* ssp. n. (Figs 10–13)

This new subspecies *bellula* from Xamneua, N. Laos is distinguishable from ssp. *duda* Staudinger, 1886, in the following characters.

♂♀. Much larger; outside of discal white band of hindwing dark bluish-green (blue tinged with purple in ssp. *duda*). Ground colour of underside brighter yellowish-green.

Distribution. N. Laos and N. Vietnam.

Length of forewing: ♂ 43–45 mm; ♀ 50–56 mm.

Holotype. ♂, Xamneua, N. Laos. 29, May 2002, now in coll. Yokochi, will be deposited in Kitakyushu Museum of Natural History & Human History, Fukuoka (KMNH). Paratypes. Xamneua, N. Laos: 1♂, 7. Jun. 2004 (in coll. T. Yokochi); 2♂, 5, Jun. 2000; 1♂, 8, Jun. 2000; 1♂, 24, Jun. 2003; 1♂, 25, May 2004; 1♀, 18, Jun. 2004 (in coll. J. Uehara). Sapa, N. Vietnam: 1♂, Jul.–Aug. 2004 (in coll. A. Funahashi); 1♀, Aug. 2000 (in coll. T. Yokochi).

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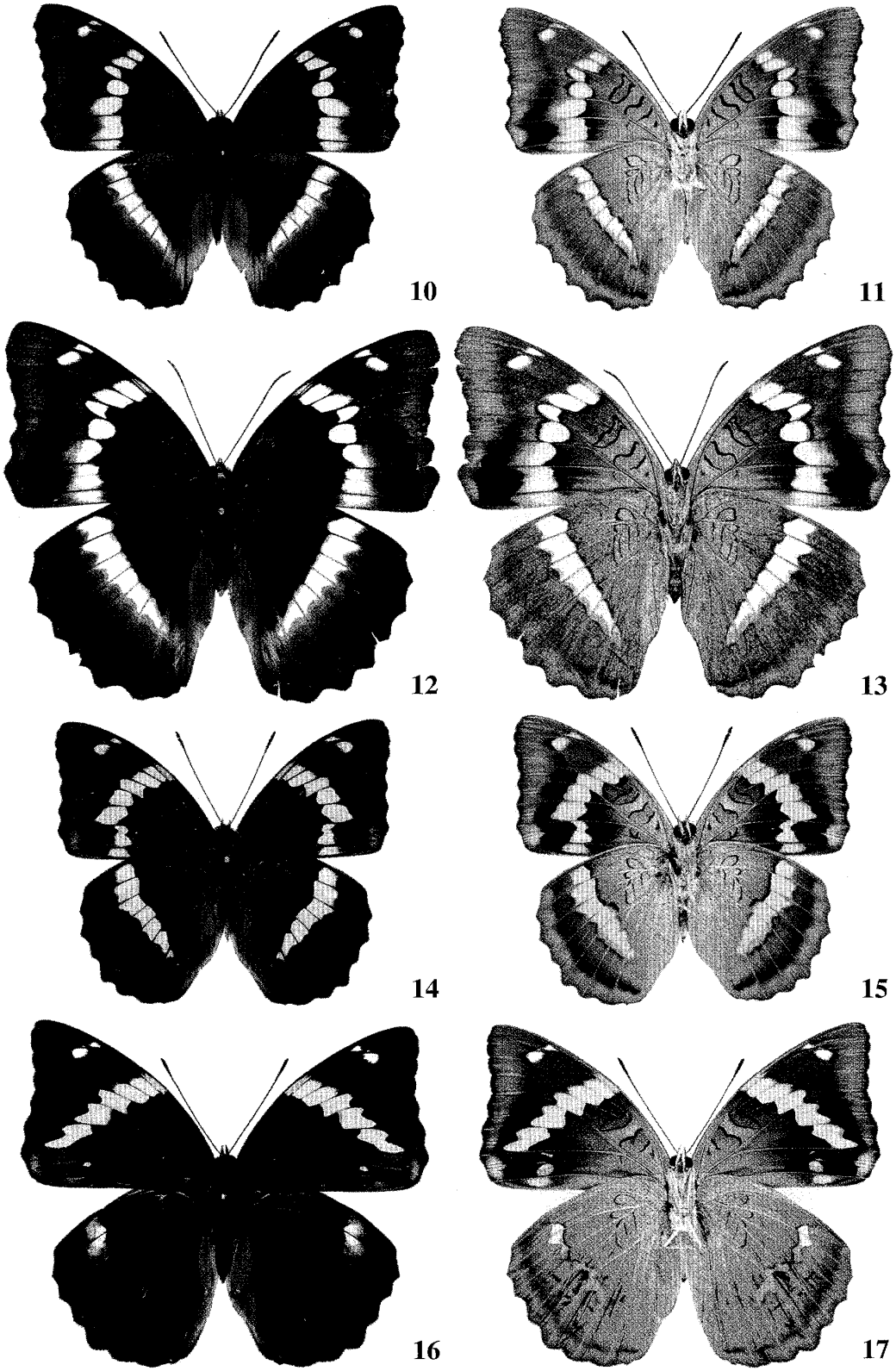

Figs 10–17. *Euthalia* (*Limbusa*) spp. 10–13. *E.* (*L.*) *duda bellula* ssp. n. (10–11: Holotype, ♂, now in coll. Yokochi. 12–13: Paratype, ♀, in coll.Yokochi). 14–17. *E.* (*L.*) *hebe tsuchiyai* ssp. n. (14–15: Holotype, ♂, now in coll. Uehara. 16–17: Paratype, ♀, in coll.Yokochi).

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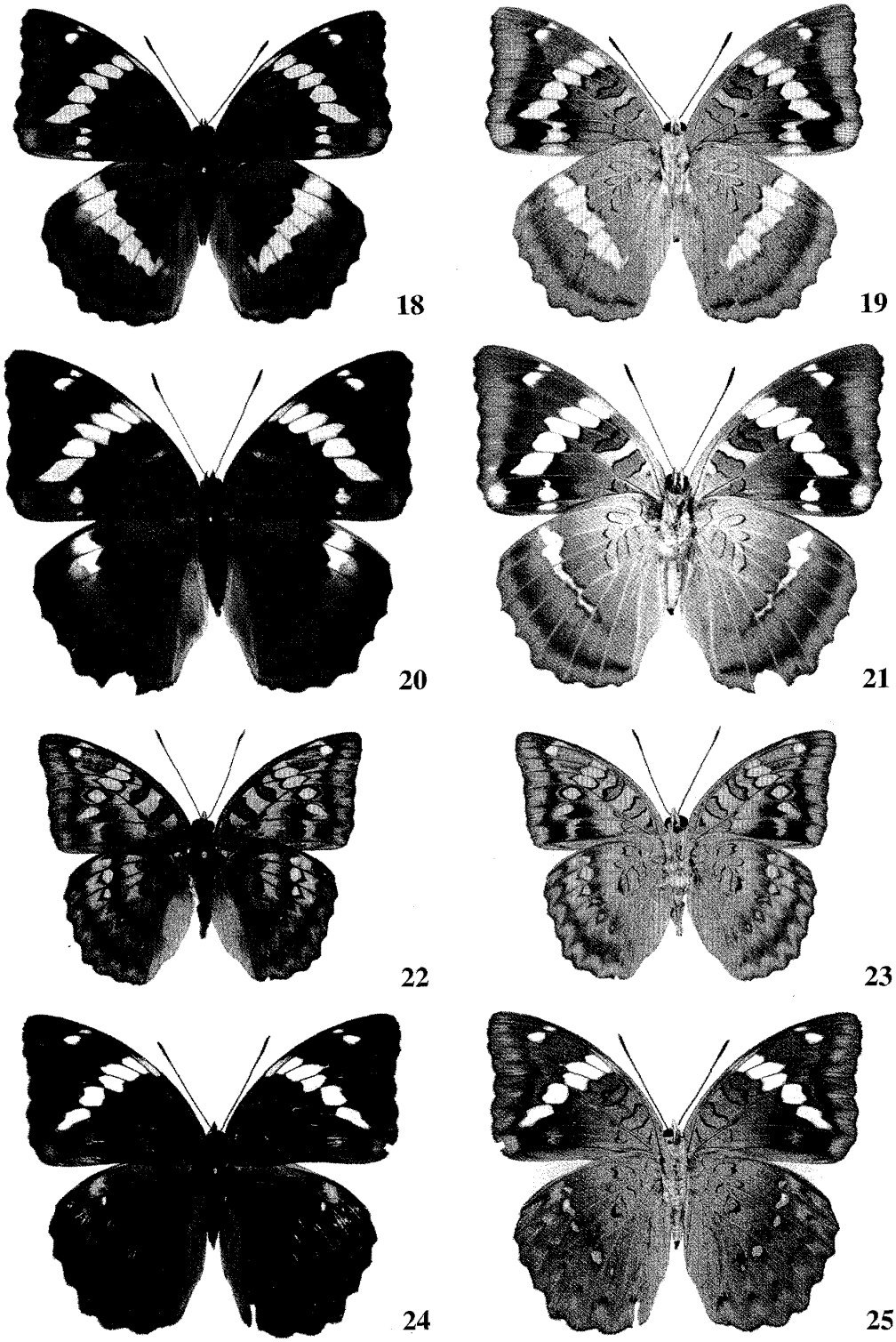

Figs 18–25. *Euthalia* (*Limbusa*) spp. 18–21. *E.* (*L.*) *pulchella niwai* ssp. n. (18–19: Holotype, ♀, now in coll. Yokochi. 20–21: Paratype, ♀, in coll.Nishimura). 22–25. *E.* (*L.*) *pyrrha ueharai* ssp. n. (22–23: Holotype, ♂, in coll. Uehara. 24–25: Paratype, ♀, in coll. Yokochi).

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The new subspecies name *bellula* means "elegant".

3. *Euthalia* (*Limbusa*) *hebe tsuchiyai* ssp. n. (Figs 14–17)

This new subspecies *tsuchiyai* from Xamneua, N. Laos is distinguishable from ssp. *hebe* Leech, 1891, in the following characters.

♂. Larger than ssp. hebe; ground colour of upperside deep green; discal band narrower and cream-yellow; ground colour of underside bluish green tinged with silver.

♀. Larger; ground colour of upperside deep green; discal row of spots of forewing deep cream-yellow; ground colour of underside bluish green.

Distribution. N. Laos and N. Vietnam.

Length of Forewing: ♂ 40–43 mm; ♀ 46–50 mm.

Holotype. ♂, Xamneua, N. Laos. 22, Jun. 2000, now in coll. J. Uehara, will be deposited in Kitakyushu Museum of Natural History & Human History, Fukuoka (KMNH). Paratypes. Xamneua, N. Laos: 1♂, Jun.–Aug. 2000; 1♀, 26, Jun. 2001; 1♀, 29, Jul. 2001; 1♂, 7, Jun. 2002; 1♂, 11, Jun. 2004; 1♂, 14, Jun. 2004. Sapa, Lao Cai, N. Vietnam: 1♂, Jul. 2002 (in coll. T. Yokochi). Xamneua, N. Laos: 1♀, 21, Jun. 1997; 2♂, 23, Jun. 1999; 1♀, 28, Jun. 1999; 1♀, 24, Aug. 1999; 1♀, 15, Jun. 2000; 1♂, 25, Jun. 2000; 1♀, 26, Jun. 2000; 1♂ 1♀, 1, Jun. 2001; 1♂ 1♀, 9, Jun. 2001; 1♂, 3, Jun. 2002; 1♀, 6, Jun. 2002; 2♂ 2♀, 9, Jun. 2002; 2♂, 10, Jun. 2002; 1♂, 11, Jun. 2002; 1♂, 14, Jun. 2002; 2♂, 15, Jun. 2002; 1♂, 2, Jul. 2002; 1♀, 10, Jun. 2002; 1♀, 16, Jun. 2002; 1♂, Jun. 2003; 1♂, 3, Jun. 2004; 1♂, 10, Jun. 2004; 1♂, 18, Jun. 2004 (in coll. J. Uehara).

The new subspecies name *tsuchiyai* is dedicated to Dr Takashi Tsuchiya, the chairman of Kizankai Memorial Hospital, Nagano, Japan.

4. *Euthalia* (*Limbusa*) *pulchella niwai* ssp. n. (Figs 18–21)

This new subspecies *niwai* from Northern Kachin, Myanmar is distinguishable from ssp. *pulchella* Lee, 1979, in the following characters.

♀. Larger than ssp. *pulchella*. The ground colour of hindwing is yellowish-green, but that of ssp. *pulchella* is bluish-green. Male unknown.

Distribution. N. Kachin, Myanmar.

Length of forewing: ♀ 44–48 mm.

Holotype. ♀, N. Kachin. 25, Jul. 1998, now in coll. Yokochi, will be deposited in Kitakyushu Museum of Natural History & Human History, Fukuoka (KMNH). Paratypes. Near Putao, N. Kachin: 2♀, 20–31, Jul. 1998 (in coll. M. Nishimura).

The new subspecies name *niwai* is dedicated to Dr Tsutou Niwa, the director of Kamiyahagi Municipal Hospital, Gifu, Japan.

5. *Euthalia* (*Limbusa*) *pyrrha ueharai* ssp. n. (Figs 22–25)

This new subspecies *ueharai* from Xamneua, N. Laos is distinguishable from ssp. *pyrrha* Leech, 1892, in the following characters.

The ground colour is darker in the male, and moss-green in the female. The female is larg-

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er than that of *pyrrha*, and the discal row of spots of the forewing is white.

Distribution. N. Laos and N. Vietnam.

Length of forewing: ♂ 37–38 mm; ♀ 46 mm.

Holotype. ♂, Xamneua, N. Laos. 18, Jun. 2001, now in coll. J. Uehara, will be deposited in Kitakyushu Museum of Natural History & Human History, Fukuoka (KMNH). Paratypes. Xamneua, N. Laos: 1♂, 8, Jun. 2000. Tam Dao, Vinh Phu, N. Vietnam: 1♂, Jul. 2002. Sapa, Lao Cai, N. Vietnam: 1♂ 1♀, Jul. 2002; 2♂, Jul. 2003 (in coll. T. Yokochi). Xamneua, N. Laos: 1♂, 1, Jul. 2000; 1♂, 29, May 2001 (in coll. J. Uehara).

The new subspecies name *ueharai* is dedicated to Mr Jiro Uehara, Kanagawa, Japan, one of my fellow entomologists.

6. *Euthalia* (*Limbusa*) *aristides kobayashii* ssp. n. (Figs 26–29)

This new subspecies *kobayashii* from Lishui, Zhejiang is distinguishable from ssp. *aristides* Oberthür, 1907, in the following characters.

♂. Ground colour of upperside paler; discal row of spots wider.

♀. Larger; ground colour of upperside tinged with bluish-green; discal band white. Ground colour of underside entirely different, tinged with bluish white (yellowish-green in ssp. *aristides*).

Distribution. Zhejiang and Fujian, China.

Length of forewing: ♂ 41–45 mm; ♀ 50–54 mm.

Holotype. ♂, Lishui, Zhejiang. Jul.–Aug. 1993, now in coll. T. Yokochi, will be deposited in Kitakyushu Museum of Natural History & Human History, Fukuoka (KMNH). Paratypes. Lishui, Zhejiang: 4♂2♀, Jul.–Aug. 1993; Wuyi-shan, Fujian: 1♂, May 1992, in coll. T. Yokochi.

The new subspecies name *kobayashii* is dedicated to Dr Tadashi Kobayashi, the previous director of Sakishima Municipal Hospital, Mie, Japan.

III. Designation of lectotype

Euthalia pratti occidentalis (Figs 30, 31)

Euthalia pratti occidentalis Hall, 1930: 159.

E. pratti occidentalis was described based on three males and two females from Ta-tsien-lou, Sialou, Tien-tsuen and Moupin (Sichuan, China), and four (!) males and two females are now preserved as "types" in BMNH, London; one male and one female are preserved in the type series drawer No. 4-5. However, two females from Siao-lou and Tien-tsuen are not *occidentalis*, but *strephon* Grose-Smith, 1893 (Siao-lou) and *nara* Moore, 1859 (Tien-tsuen).

I designate one male as lectotype here (Figs 30, 31). Lectotype ♂, here designated [examined], labelled "Type (red)/Siao-Lou Chasseurs indigenes, 1893./*Ex.* Oberthur Coll. Brit. Mus. 1927-3./Rhopalocera Slide No. 29848." The lectotype material is in the type series drawer No. 4-5.

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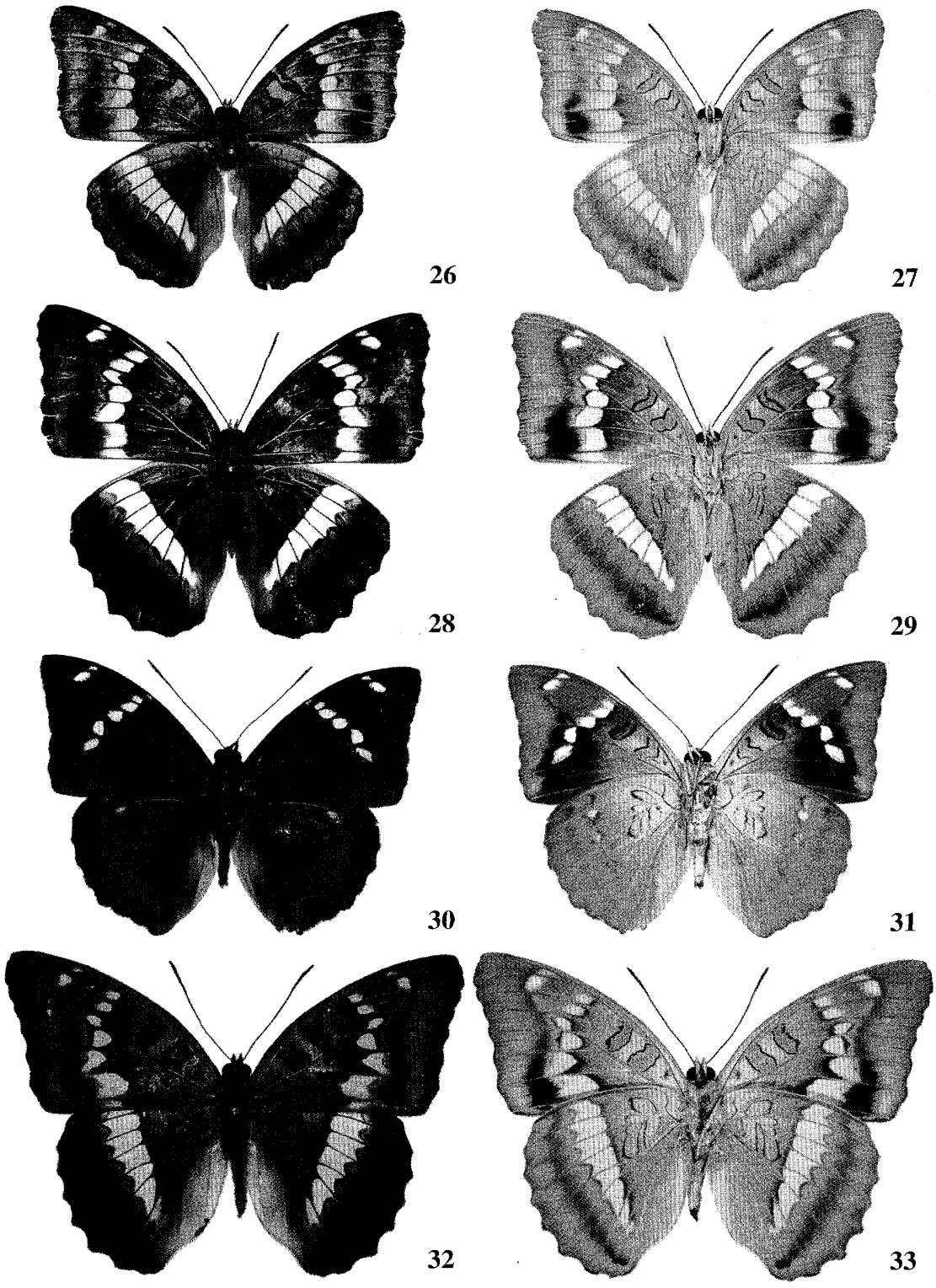

Figs 26–29. *Euthalia* (*Limbusa*) *aristides kobayashii* ssp. n. (26–27: Holotype, ♂, now in coll. Yokochi. 28–29: Paratype, ♀, in coll. Yokochi).

Figs 30–33. Type material of *Euthalia* spp. in coll. The Natural History Museum, London. 30–31. *E. pratti occidentalis*. Lectotype, ♂. 32–33. *E. aristides*. Syntype, ♂.

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IV. Notes on some species

I add below some remarks about the type materials of *aristides* and *formosana*.

1. *Euthalia aristides* (Figs 32, 33)

Euthalia aristides Oberthür, 1907:260.

E. aristides was described based on some materials from Tien-tsuen, Siao-lou, Mou-pin and Ta-tsien-lou (Sichuan, China), and fifty males are now preserved in BMNH, London. The type series labelled "Oberthür collection" is comprised of eight males from Tien-tsuen, seven males from Mou-pin, twenty-four males from Siao-lou, and eleven males from Ta-tsien-lou. Two males from Mou-pin (drawers No. 17-218) are *thibetana* (=*undosa*), and not *aristides*. Though one male in the type drawers No. 4-4 is labelled "Type (red)/*Aristides* Obthr. exempl. type a servi pour la description./Tien-Tsuen, Yuin-Kin, 1899, Chasseurs indigenes./*Ex*. Oberthur Coll. Brit. Mus. 1927-3/B. M. (N. H.) Rhopalocera Slide No. 29822", it has never been designated as lectotype.

2. *Euthalia formosana*

Euthalia formosana Fruhstorfer, 1908: 102.

E. formosana was described based on six males from Kosempo (Taiwan, China) by Fruhstorfer (1908). Six males and two females are now preserved in Fruhstorfer collection (MNHN, Paris). Among them, five males are labeled "VI 08" (presumably June 1908), and are clearly part of the type materials. Though one female is labelled "Type (red)" and "VI 08", the original description mentions only males in the type series. It is supposed that the author misidentified the sex of this specimen. The other male and one female have a label that shows a date after the description was published.

Acknowledgements

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摘　　要

イナズマチョウ属の1新種と6新亜種の記載および*Euthalia occidentalis*のレクトタイプ指定
(横地　隆)

イナズマチョウ属の1新種と6新亜種の記載を行い, 同属における1タクソン, *Euthalia occidentalis*のレクトタイプ指定を行った.

I. 新種の記載

Euthalia (*Limbusa*) *koharai* sp. n. (図1–4)

♂. 前翅長43–48 mm. 翅形: 前翅, 前縁は滑らかに湾曲し, 翅頂はやや丸みを帯びる; 外縁はわずかに内側に凹み, 各翅脈端は突出する; 後縁は直線状. 後翅. 外縁は各翅脈端で強く突出する. 斑紋: 前翅表面, 地色は濃緑茶色; 亜基部付近の本属特有の環状斑群は明瞭; 外中央白紋列は淡黄色で1a室から第6室におよび, 第3室の外側に黒色のくさび形の縁取りがある; 前縁には白色鱗が侵入しない; 亜翅端部は第6室と第8室に淡黄色紋がある; 亜外縁部は第1b室から前縁部にかけて黒色帯があり, 第3, 4室で内側に偏位する; 縁毛は白色で翅脈端は黒色. 後翅表面, 地色は前翅と同様; 中室端の黒色だ円形紋は明瞭; 黄白色の外中央紋列は第1b室から第7室におよび, その外側にはブーメラン型の黒紋列がある; 外中央白紋列の外側には青白色域があり, 外縁にむかって濃紺色に段階的に変色する; 縁毛は白色で翅脈端は黒色. 前翅裏面, 地色は個体変異をみるが緑がかった黄茶色; 亜外縁部は第1a室から前縁部に黒色帯があるが, 第1b, 2室を除いて痕跡的. 後翅裏面, 地色は前翅と同様; 基部の不正形環状斑は明瞭; 外中央白紋列の内側は黒条があり白紋の内側を縁どる; 亜外縁部は第1b室より第7室まで緑青色帯があるが, 第1b室では顕著な黒紋となる. 翅脈: 後翅中室端は開く. 触角: 表面は黒色, 裏面は一様に褐色である. ♂ゲニタリア (図9): Uncusは先端方向に一様に先細る; valvaはやや細長く, 中央部がやや太く, 先端部分は10数個の短い棘がある; valvaの先端は下方が外側に90度程度捻れる.

♀. 前翅長48–51 mm. 翅形: ♂に同形だが全体に丸みを帯びる. 斑紋: ♂に類似する; 裏面地色は前後翅の地色は個体変異をみるが, 淡黄緑色. 翅脈: ♂と同様. 触角: ♂と同様.

分布: 中国雲南省, 広西壮族自治区.

新小名*koharai*は, 昆虫研究者の小原洋一氏 (東京) に因む.

本種は中国大陸を分布の中心にもつ*Euthalia*属の*Limbusa*亜属に含まれる. *Limbusa*亜属には前後翅を貫くイチモンジ白帯をもつグループがあり, 本種もこれに属する. これらは互いに類似した特徴のため, 種間の鑑別は容易ではない.

本種に最も類似する種は, *thibetana*と*alpherakyi*であり, 以下に鑑別点を列記する.

なお, ここで言及する種*thibetana*とは, 従来より種*undosa*として認知されているものを指す. 筆者の調査で, *undosa*は*thibetana*のシノニムとするのが正しいことが分かった. 本件については, 別の機会に詳細を報告する予定である.

種*thibetana*との鑑別

1) *Koharai*は*thibetana*に比べ大型で, 翅形はやや丸みを帯びる.
2) *Koharai*のイチモンジ帯は, 前翅は淡黄色, 後翅は黄白色であるが, *thibetana*はさらに黄色味が強い.

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3) *Koharai* の表面地色は濃緑青色であるが, *thibetana* は茶色味が強い.

種 *alpherakyi* との鑑別

1) *Koharai* では後翅中央白帯の外側に青白色が出現するが, *alpherakyi* では認めない.
2) *Koharai* では♂前翅第3室の白紋は外側に尖るが, *alpherakyi* ではほぼ平坦.
3) *Koharai* では♂ゲニタリアの valva 先端はほぼ90度に捻れるが, *alpherakyi* では捻れは緩やか.

II. 新亜種の記載

1. *Euthalia* (*Limbusa*) *pacifica masaokai* ssp. n. (図 5–8)

ラオス北部・サムネアを基産地とするこの新亜種は, 原名亜種 *pacifica* に比べて次のような相違点がある.

♂. 表面の地色は深緑色を呈する (原名亜種は茶褐色); 前翅第3室に黄色斑を認める; 後翅黄色域が小さく, 第1b室と第2室の一部に認める (原名亜種では第1b, 2室の全てと第3, 4, 5室に及ぶ); 裏面の地色は青緑色を呈する (原名亜種はウグイス色); 後翅裏面の斑紋は明瞭に出現 (原名亜種はぼやける).

♀: 表面の地色は深緑色を呈する (原名亜種はモスグリーン色); 前翅の斜白帯は大きく出現; 後翅亜外縁の斑列はやや不明瞭; 裏面の地色は青緑色を呈する (原名亜種はウグイス色).

分布: ラオス北部.

新亜種名 *masaokai* は, 名古屋市立大学名誉教授, 正岡昭博士に献名した.

2. *Euthalia* (*Limbusa*) *duda bellula* ssp. n. (図 10–13)

ラオス北部・サムネアを基産地とするこの新亜種は, 原名亜種 *duda* に比べて, ♂♀ともにはるかに大型. 後翅の白帯外側は原亜種の紫色がかった青色とは異なり, 濃青緑色を呈する. また裏面は明るい黄緑色となる.

分布: ラオス北部, ベトナム北部.

新亜種名 *bellula* は, ラテン語で「優しい, 優雅な」の意.

3. *Euthalia* (*Limbusa*) *hebe tsuchiyai* ssp. n. (図 14–17)

ラオス北部・サムネアを基産地とするこの新亜種は, 原名亜種 *hebe* に比べて次のような相違点がある.

♂: 原亜種に比較して大きい; 表面の地色は深緑色を呈する; 中央帯は細く, クリームイエロー; 裏面の地色は銀色がかった青緑色.

♀: 原亜種に比べ, 大きい; 表面の地色は深緑色を呈する; 前翅斜帯は濃いクリームイエロー; 裏面の地色は青緑色.

分布: ラオス北部, ベトナム北部.

新亜種名 *tsuchiyai* は, 医療法人輝山会記念病院理事長, 土屋隆博士に献名した.

4. *Euthalia* (*Limbusa*) *pulchella niwai* ssp. n. (図 18–21)

ミャンマーのカチン州北部を基産地とするこの新亜種の♀は, 亜種 *pulchella* に比べて大型. 裏面の地色は *pulchella* の青緑色に対して, 本亜種は黄緑色. ♂は未知.

分布：ミャンマーカチン州北部。

新亜種名 *niwai* は, 岐阜県国保上矢作病院院長, 丹羽傳博士に献名した.

5. *Euthalia* (*Limbusa*) *pyrrha ueharai* ssp. n. (図 22–25)

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ラオス北部・サムネアを基産地とするこの新亜種は, 原名亜種*pyrrha*に比べて, ♂は地色が暗くなる. ♀は地色が濃緑色でやや大型, 前翅紋列は白色.

分布: ラオス北部, ベトナム北部.

新亜種名*ueharai*は, 神奈川県在住の昆虫研究者, 上原二郎氏に献名した.

6. *Euthalia* (*Limbusa*) *aristides kobayashii* ssp. n. (図26–29)

中国浙江省・麗水を基産地とするこの新亜種は, 原名亜種*aristides*に比べて, ♂は翅表の地色がうすくなり, イチモンジ帯がやや太い. ♀は大型で, 翅表の地色は青緑色を帯び, イチモンジ帯は白色となる. 裏面色調は全く異なり, 原名亜種のような黄緑色ではなく青白色を帯びる.

分布: 中国浙江省, 福建省.

新亜種名*kobayashii*は, 三重県志摩町国保前島病院の元院長, 小林端博士に献名した.

III. レクトタイプの指定

*Limbusa*亜属の*occidentalis*について, レクトタイプの指定を行った.

Euthalia occidentalis (図30, 31)

*E. occidentalis*は, 3♂2♀をもとに, Ta-tsien-lou, Sialou, Tien-tsuen, Moupin (中国四川省) を基産地として記載されたが, BMNHには4♂ (!) 2♀がタイプシリーズとして保管されている. このうち1♂1♀がタイプ箱 (No. 4-5) に保管されている. 2♀は別種の*strephon*と*nara*であるため, タイプ箱に保管されている1♂をレクトタイプに指定した.

IV. *Limbusa*亜属に関する覚書

下記に*aristides*, *formosana*のタイプ標本に関する覚え書きを記した.

1. *E. aristides* (図32, 33)

Tien-tsuen, Siao-lou, Mou-pin, Ta-tsien-lou (中国四川省) を基産地とする*aristides*は, 原記載でタイプの個体数は明記されていない. BMNHには50♂がタイプとして保管されている. すべてOberthürコレクションのラベルが付され, 内訳はMou-pin産7♂, Siao-lou産24♂, Tien-Tsuen産8♂, Ta-tsien-lou産11♂である. このうち, Mou-pin産のうちの2♂ (タイプ箱No. 17-218) は種*aristides*ではなく, 別種の*thibetana*である. タイプ箱に保管されている1♂は, タイプ指定のラベルが付されているが, 原記載ではホロタイプ指定はされておらず, また以後の年代にもレクトタイプ指定は行われていない.

2. *Euthalia formosana*

*E. formosana*はFruhstorferにより, 1908年に6♂をタイプとして記載された. MNHNのFruhstorferコレクションに現存する*formosana*の個体は6♂2♀である. このうち, 5♀には "VI 08" (June 1908と推察) のラベルがあり, タイプシリーズと考えられる. 1♀には "Type (red)" を示すラベルが付されているが, 原記載ではタイプは全て♂であることから, 記載時の♂♀誤同定の可能性もあろう. なお, 残りの1♂1♀には, 原記載発行年以後のラベルが付けられている.

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